

**REMARKS**

The present application relates to a polyether ester elastic fiber.

Claims 1 - 10 and 14 - 17 are all the claims pending in the application. Claims 1, 6 - 8, and 15 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over EP 0821086 (Yamamura). Claims 9 - 10 and 17 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura in view of U.S. Patent Application Publication 2003/0024052 (Azuse). Claims 2 - 5 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura in view of JP 62-243873 (Toray) (the abstract). Claim 16 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura in view of Azuse in further view of Toray.

Claim 1 is amended to incorporate the subject matter of claim 2.

Claims 3, 4, and 5 are amended to depend from claim 1.

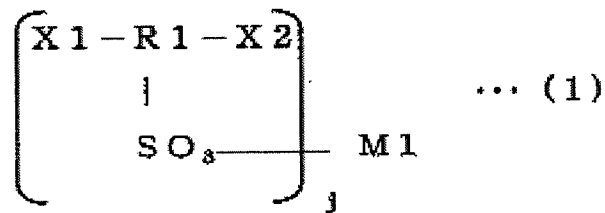
Claims 2, 6, 7, 14 - 17 are canceled.

The presently claimed invention in claim 1 includes the following features.

In the presently claimed invention, it is important that the elastic fiber has a coefficient of moisture absorption of not less than 5% at 35°C and at a RH of 95% and a coefficient of water absorption extension of not less than 10%. Thereby, a woven or knitted fabric comprising such elastic fibers produces a fabric giving excellent comfortableness and having the so-called self-adjusting function wherein, when the woven or knitted fabric absorbs sweat or the like, the fibers are extended to open the stitches of the woven or knitted fabric to release moisture in the clothing. When the woven or knitted fabric is dried, the fibers are contracted into their original

lengths, thereby clogging the stitches of the woven or knitted fabric to prevent the release of temperature in the clothing. See page 6, line 9 - 19 of the present specification.

The above-mentioned high coefficient of moisture absorption and the above-mentioned high coefficient of water absorption extension can readily be achieved in accordance with the present invention by copolymerizing the above-mentioned polyether ester elastomer with a metal organic sulfonate represented by the following general formula (1) and controlling the intrinsic viscosity of the elastic fiber to not less than 0.9. See page 9, lines 13 - 24 of the present specification.



#### Response to Rejection Based on Yamamura (EP 0 821 086)

Claims 1, 6 - 8, and 15 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura.

Applicant respectfully traverses for at least the following reasons.

Applicant respectfully submits that although Yamamura discloses a polyether ester elastic fiber, Yamamura does not teach or suggest the polyether ester elastomer copolymerized with a metal organic sulfonate. See claim 1.

Moreover, Applicant has amended claim 1 to incorporate the subject matter of claim 2, which was not included in this rejection. Applicant respectfully submits that the amendment of claim 1 further obviates this rejection.

Claim 8 depends directly from claim 1.

Claims 6, 7, and 15 are canceled, which renders the above rejection moot with respect to these claims.

Thus, the Yamamura reference does not affect the non-obviousness of claims 1 and 8.

**Response to Rejection Based on Yamamura in View of Azuse**

Claims 9 - 10 and 17 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura in view of Azuse.

Applicant respectfully traverses for at least the following reasons.

Azuse discloses the finishing oil for mainly hydrophobic elastic fibers to enhance their antistatic property and prevent said fibers from tacking with one another during processing. See paragraph [0001] of Azuse. However, Azuse does not teach the polyether ester elastomer copolymerized with a metal organic sulfonate.

Moreover, Applicant has amended claim 1 to recite the subject matter of claim 2, which was not included in this rejection. Applicant respectfully submits that the amendment of independent claim 1 also obviates this rejection.

Claims 9 and 10 depend from claim 1, directly or indirectly.

Claim 17 is canceled, which renders the above rejection moot with respect to this claim.

Therefore, Yamamura in view of Azuse does not affect the non-obviousness of the claims 9 and 10.

**Response to Rejection Based on Yamamura in View of Toray**

Claims 2 - 5 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura in view of JP 62-243873 (Toray) (also referred to in the Office Action as the “abstract”).

Applicant respectfully traverses for at least the following reasons.

There is no teaching, suggestion, motivation, or other reason to combine Yamamura with Toray.

Yamamura has been described above.

The Toray discloses polyester fibers comprising a polyester copolymerized with a metal sulfonate. See Abstract of Toray. However, Toray teaches that the polyester fibers have only a good deodorizing effect.

Accordingly, Toray does not teach a polyether ester elastic fiber comprising the polyether ester elastomer copolymerized with a metal organic sulfonate that such provides a fabric having a good moisture-absorbing property and is reversibly largely expanded or contracted by the absorption or release of water to exhibit excellent comfortableness.

Further, neither Yamamura nor Toray teach or suggest a polyether ester elastic fiber comprising a polyether ester elastomer containing polybutylene terephthalate as a hard segment and polyoxyethylene glycol as a soft segment, and the polyether ester elastomer copolymerized with a metal organic sulfonate that provides a fabric having a good moisture-absorbing property and is reversibly largely expanded or contracted by the absorption or release of water to exhibit excellent comfortableness.

Moreover, neither Yamamura nor Toray teach that a woven or knitted fabric comprising the aforementioned elastic fibers has the so-called self-adjusting function wherein, when the

fabric absorbs sweat, the fibers are extended to open the stitches of the fabric to release moisture in the clothing, and when the fabric is dried, the fibers are contracted back to the original lengths, thereby clogging the stitches of the fabric to prevent the release of temperature in the clothing,

Claim 2 is canceled, which renders the above rejection moot with respect to this claim.

Accordingly, Yamamura and Toray do not affect the non-obviousness of claims 3 - 5.

**Response to Rejection Based on Yamamura View of Azuse in View of Toray**

Claim 16 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamamura in view of Azuse, further in view of Toray.

Claim 16 is canceled, which renders this rejection moot.


Reconsideration and withdrawal of the § 103 obviousness rejections of remaining claims 1, 3 - 5, and 8 - 10 are respectfully submitted to be proper.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby earnestly solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local, D.C. telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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